

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022596**Date Inspected:** 14-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Liu Hua Jie**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 008822

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 13B/CW. The weld designations reviewed are as follows:

1. SEG3014J-148
2. SEG3014E-148
3. SEG3014J-146, 147, 014
4. SEG3014G-129, 130, 014
5. SEG3014E-146, 147, 014
6. SEG3014C-129, 130, 014
7. SEG3015C-129, 130, 014, 069, 094

OBG Trail Assembly

This QA Inspector observed the following work in progress:

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## WELDING INSPECTION REPORT

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Shielded Metal Arc Welding (SMAW) welding of weld joint OBW13A-016 located on Deck panel to Deck Panel of OBG Segment 13BW to OBG Segment 13CW. ZPMC Welder is identified as 045213. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G-(4F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20634.

SMAW welding of weld joint SEG3015-001 located on Deck panel to Deck Panel of OBG Segment 13CW. ZPMC Welder is identified as 067588. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G-(4F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20631.

SMAW welding of weld joint DP3148-001-243 and 244 located on Deck Panel Diaphragm to Longitudinal Diaphragm at panel point 122.5 of OBG Segment 13CW. ZPMC Welder is identified as 066019. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20531.

SMAW welding of weld joint DP3148-001-246 and 247 located on Deck Panel Diaphragm to Longitudinal Diaphragm at panel point 123 of OBG Segment 13CW. ZPMC Welder is identified as 066019. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20531.

This QA inspector observed ZPMC personnel performed Magnetic particle Testing (MT) on Bottom Plate and Side Plate RS stiffener to Floor Beam at panel point 121.5 cross beam side of OBG Segment 13BW. See the attached picture.

Bay 14

This QA Inspector observed the following work in progress:

SMAW welding of weld joint SEG3020X-005 located on Longitudinal Diaphragm to Anchor Plate at panel point 125 to 127 of OBG Segment 14W. ZPMC Welder is identified as 069841. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3020X-007 located on Longitudinal Diaphragm to Anchor Plate at panel point 125 to 127 of OBG Segment 14W. ZPMC Welder is identified as 066261. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3020H-007 located on Deck panel diaphragm to Floor Beam Flange at panel point 127.5 of OBG Segment 14W. ZPMC Welder is identified as 066421. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the

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## WELDING INSPECTION REPORT

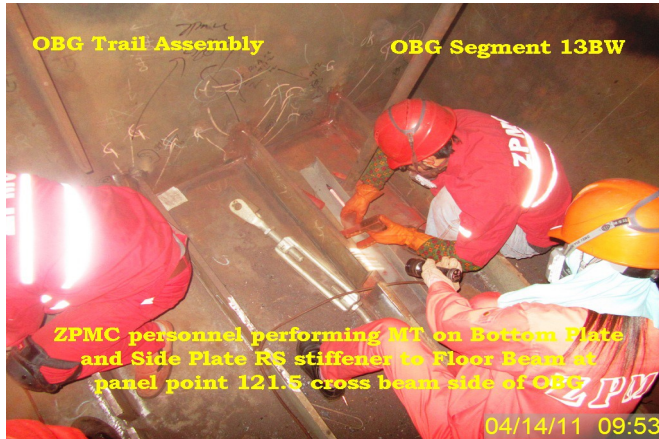
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Applicable WPS-B-T-2232-ESAB.

FCAW welding of weld joint SEG3020F-011 located on Deck panel diaphragm to Floor Beam Flange at panel point 128 of OBG Segment 14W. ZPMC Welder is identified as 067275. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar,Vibin	Quality Assurance Inspector
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<b>Reviewed By:</b>	Patel,Hiranch	QA Reviewer
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